Fill in the Blanks Tree Diagrams for Dependent Events

Question	Tree Diagram	Probability
There are some white counters and some red counters in a bag. Two counters are taken from the bag at random. Complete the tree diagram and calculate the missing probabilities.	$ \begin{array}{c} $	$P(WW) = \frac{3}{8} \times \frac{2}{7} = \frac{6}{56}$
		$P(WR) = \frac{3}{8} \times \frac{5}{7} = \frac{15}{56}$
		$P(RW) = \frac{5}{8} \times \frac{3}{7} = \frac{15}{56}$
		$P(RR) = \frac{5}{8} \times \frac{4}{7} = \frac{20}{56}$
There are some apples and some oranges in a fruit bowl. Two pieces of fruit are chosen at random. Complete the tree diagram and calculate the missing probabilities.	<u>2nd Fruit</u> 1st Fruit	$P(AA) = \frac{3}{10} \times \frac{2}{9} = \frac{6}{90}$
	$ \begin{array}{c} 3 \\ \overline{10} \\ \overline{7} \\ \overline{9} \\ $	$P(AO) = \frac{3}{10} \times \frac{7}{9} = \frac{21}{90}$
		$P(OA) = \frac{7}{10} \times \frac{3}{9} = \frac{21}{90}$
		$P(00) = \frac{7}{10} \times \frac{6}{9} = \frac{42}{90}$
Milo has some black socks and some grey socks in a drawer. He chooses two socks at random. Draw a tree diagram and calculate the missing probabilities.	$ \begin{array}{c} 2nd Sock \\ \underline{1st Sock} \\ \overline{12} \\ \overline{12} \\ \overline{12} \\ \overline{11} \\ \overline{5} \\ \overline{11} \\ \overline{Grey} \\ $	$P(BB) = \frac{7}{12} \times \frac{6}{11} = \frac{42}{132}$
		$P(BG) = \frac{7}{12} \times \frac{5}{11} = \frac{35}{132}$
		$P(GB) = \frac{5}{12} \times \frac{7}{11} = \frac{35}{132}$
		$P(GG) = \frac{5}{12} \times \frac{4}{11} = \frac{20}{132}$
Adrianna buys some sausage rolls and some cheese pasties from the bakery. She chooses two items at random to eat for lunch. Draw a tree diagram and calculate the missing probabilities.	$ \begin{array}{c} $	$P(SS) = \frac{7}{11} \times \frac{6}{10} = \frac{42}{110}$
		$P(SC) = \frac{7}{11} \times \frac{4}{10} = \frac{28}{110}$
		$P(CS) = \frac{4}{11} \times \frac{7}{10} = \frac{28}{110}$
		$P(CC) = \frac{4}{11} \times \frac{3}{10} = \frac{12}{110}$